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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/551,597	04/17/2000	Toyoshige Nohnishi	000344	1365

38834   7590   01/15/2004

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
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WASHINGTON, DC 20036

EXAMINER
LAMB, TWYLER MARIE

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 01/15/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _07 October 2003_ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-7_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) _4 and 5_ is/are allowed.

6) ☒ Claim(s) _1-3,6 and 7_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

   If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☒ All   b) ☐ Some * c) ☐ None of:

   1. ☒ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

   a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Specification

1.   The abstract of the disclosure is objected to because the legal phraseology

"disclosed" is used. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by

Ito et al. (Ito) (US 5,724,154).

With regard to claims 1 and 7, Ito discloses a page printer (Figure 1) comprising:

a printer engine (printer unit 2); a memory (image memory unit 9) which includes an

input area, for storing input data (col 3, lines 11-13), a compression area (memories A

506 to D 509), for storing compressed drawing data (col 12, lines 42-44), and a bit-map

area (buffer 501), for storing expanded drawing data (col 14, lines 35-37); a

compression circuit (compression circuit 503), for compressing drawing data (col 12,

lines 25-27) and for storing the resultant compressed drawing data in said compression

area of said memory (col 12, lines 42-44); a expanding circuit (expanding circuit 504),

for expanding said compressed drawing data (col 14, lines 33-35) and for storing the

resultant expanded drawing data in said bit-map area of said memory (col 14, lines 35-

37); a video output circuit (video control circuit 1004), for transferring said expanded

drawing data to said printer engine (col 6, lines 22-25); and a controller (CPU 1003) for

analyzing said input data for each job (col 6, lines 35-40).

Ito does not clearly teach creating drawing data for a designated resolution,

wherein said controller changes said designated resolution to a lower one, and repeats

an input data analyzation process beginning with said input data entered for the first

page of said job when said controller detects a memory shortage of said compressed

area, and prints said job at the lower printing resolution.

Sugaya discloses a printer that includes creating drawing data for a designated

resolution, wherein said controller changes said designated resolution to a lower one,

and repeats an input data analyzation process beginning with said input data entered

for the first page of said job when said controller detects a memory shortage of said

compressed area, and prints said job at the lower printing resolution (col 3, lines 6-14).

Therefore it would have been obvious to one of ordinary skill in the art at the time

of the invention to have modified Ito to include creating drawing data for a designated

resolution, wherein said controller changes said designated resolution to a lower one,

and repeats an input data analyzation process beginning with said input data entered

for the first page of said job when said controller detects a memory shortage of said

compressed area, and prints said job at the lower printing resolution as taught by

Sugaya. It would have been obvious to one of ordinary skill in the art at the time of the

invention to have modified Ito by the teaching of Sugaya to keep the memory free as

taught by Sugaya in col 3, lines 6-14.

With regard to claim 2, Ito also discloses said controller updates a memory variable indicating the remaining capacity of said compression area at each time said compression circuit writes said compressed drawing data in said compression area of said memory, and in accordance with said remaining capacity, determines whether said memory shortage has occurred (col 13, lines 43-58).

With regard to claim 3, Ito also discloses further comprising: selection means which, to restart printing, selects either the first page of said job or a page whereat said memory shortage occurred, wherein, when a page whereat said memory shortage occurred is selected, said controller begins the analyzation of input data for said page whereat said memory shortage occurred (col 10, lines 15- 66).

With regard to claim 6, Ito also discloses said controller has an analyze pointer for indicating an analyze position of said inputted data for said job and initializes said analyze pointer when detects said memory shortage (col 10, lines 15- 66).

Allowable Subject Matter

4.   Claims 4 and 5 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4 identifies the unique feature "said controller creates a resolution change message to print on said resolution change page".

Claim 5 identifies the unique feature "said controller displays a resolution change message on a display panel".

Response to Arguments

5.   Applicant's arguments with respect to claims 1-7 have been considered but are

moot in view of the new ground(s) of rejection.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Twyler Lamb whose telephone number is 703 - 305-

8823. The examiner can normally be reached on M-TH (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Edward L Coles can be reached on 703-305-4712. The fax phone numbers

for the organization where this application or proceeding is assigned are 703-746-6036

for regular communications and 703-872-9314 for After Final communications.

Any response to this action should be mailed to:

        Commissioner of Patents and Trademarks
        Washington, DC 20231
or faxed to:
        (703) 872-9314
        (for informal or draft communications, such as proposed amendments to be
        discussed at an interview; please label such communications "PROPOSED" or
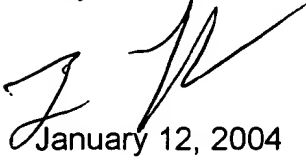   "DRAFT")
or hand-carried to:
        Crystal Park Two
        2121 Crystal Drive
        Arlington. VA.
        Sixth Floor (Receptionist)

Twyler Lamb

January 12, 2004